



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0366; Project Identifier MCAI-2021-00080-T; Amendment 39-21685; AD 2021-17-02]

RIN 2120-AA64

Airworthiness Directives; ATR – GIE Avions de Transport Régional Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2020-23-13, which applied to all ATR – GIE Avions de Transport Régional Model ATR42-200, -300, and -320 airplanes. AD 2020-23-13 required a one-time inspection for discrepancies of the wire bundles between the left- and right-hand angle of attack (AOA) probes and the crew alerting computer, and, depending on findings, applicable corrective actions. This AD continues to require the actions in AD 2020-23-13, and also requires for certain airplanes, modifying the captain stick shaker wiring, and for all airplanes, revising the existing aircraft flight manual (AFM) and applicable corresponding operational procedures to incorporate procedures for the stick pusher/shaker, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD was prompted by false activation of the stall warning system due to wiring damage on the wire bundle between an AOA probe and the crew alerting computer, and the development of a wiring modification and AFM update to address the unsafe condition. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For material incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this IBR material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0366.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0366; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Shahram Daneshmandi, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3220; email: shahram.daneshmandi@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0024, dated January 19, 2021 (EASA AD 2021-0024) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all ATR – GIE Avions de Transport Régional Model ATR42-200, -300, and -320 airplanes.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2020-23-13, Amendment 39-21330 (85 FR 73407, November 18, 2020) (AD 2020-23-13). AD 2020-23-13 applied to all ATR – GIE Avions de Transport Régional Model ATR42-200, -300, and -320 airplanes. The NPRM published in the *Federal Register* on May 13, 2021 (86 FR 26195). The NPRM was prompted by false activation of the stall warning system due to wiring damage on the wire bundle between an AOA probe and the crew alerting computer, and the development of a wiring modification and AFM update to address the unsafe condition. The NPRM proposed to continue to require the actions in AD 2020-23-13, and also proposed to require for certain airplanes, modifying the captain stick shaker wiring, and for all airplanes, revising the existing AFM and applicable corresponding operational procedures to incorporate procedures for the stick pusher/shaker, as specified in EASA AD 2021-0024.

The FAA is issuing this AD to address false activation of the stall warning system, which could result in loss of control of the airplane during take-off and landing phases. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA has considered the comment received. The Air Line Pilots Association, International (ALPA) indicated its support for the NPRM.

Explanation of Changes to this AD

The FAA has added paragraph (h)(7) of this AD to clarify what “discrepancies” are since the ATR Airworthiness Operators Message (AOM) referred to in EASA AD 2021-0024 does not use the word “discrepancy.”

The FAA has revised paragraph (h)(4)(ii) of this AD to clarify that, for inspections done on or before December 3, 2020, those reports must be submitted “within 30 days after December 3, 2020.” In the proposed AD, the FAA inadvertently stated that the reports were to be submitted “within 30 days after the effective date of this AD.” However, this requirement is retained from AD 2020-23-13 and the FAA intends for the compliance time to remain the same.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR Part 51

EASA AD 2021-0024 describes procedures for a one-time detailed visual inspection of the wire bundles between the left- and right-hand AOA probes and the crew alerting computer for discrepancies (including, but not limited to, wire damage, missing or damaged conduits, and incorrect routing of wiring and conduits), and, depending on

findings, applicable corrective actions. EASA AD 2021-0024 also describes procedures for modifying the captain stick shaker wiring, and amending the systems limitations section of the applicable AFM to incorporate procedures for the stick pusher/shaker. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 26 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions*

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2020-23-13	Up to 10 work-hours X \$85 per hour = Up to \$850	\$0	Up to \$850	Up to \$22,100
New proposed actions	4 work-hours X \$85 per hour = \$340	\$100	\$440	\$11,440

*Table does not include estimated costs for reporting.

The FAA estimates that it would take about 1 work-hour per product to comply with the proposed reporting requirement in this AD. The average labor rate is \$85 per hour. Based on these figures, the FAA estimates the cost of reporting the inspection results on U.S. operators to be \$2,210, or \$85 per product.

The FAA has received no definitive data on which to base the cost estimates for the on-condition actions specified in this AD.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control

number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2020-23-13, Amendment 39-21330 (85 FR 73407, November 18, 2020); and

- b. Adding the following new AD:

2021-17-02 ATR – GIE Avions de Transport Régional: Amendment 39-21685; Docket No. FAA-2021-0366; Project Identifier MCAI-2021-00080-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2020-23-13, Amendment 39-21330 (85 FR 73407, November 18, 2020) (AD 2020-23-13).

(c) Applicability

This AD applies to all ATR – GIE Avions de Transport Régional Model ATR42-200, -300, and -320 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 31, Instruments.

(e) Reason

This AD was prompted by false activation of the stall warning system due to wiring damage on the wire bundle between an angle of attack (AOA) probe and the crew alerting computer, and the development of a wiring modification and aircraft flight manual (AFM) update to address the unsafe condition. The FAA is issuing this AD to address this condition, which could result in loss of control of the airplane during take-off and landing phases.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2021-0024, dated January 19, 2021 (EASA AD 2021-0024).

(h) Exceptions to EASA AD 2021-0024

(1) Where EASA AD 2021-0024 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2021-0024 refers to “the effective date of EASA AD 2020-0221,” this AD requires using December 3, 2020 (the effective date of AD 2020-23-13).

(3) The “Remarks” section of EASA AD 2021-0024 does not apply to this AD.

(4) Paragraph (3) of EASA AD 2021-0024 specifies to report inspection results to ATR – GIE Avions de Transport Régional within a certain compliance time. For this AD, report inspection results at the applicable time specified in paragraph (h)(4)(i) or (ii) of this AD.

(i) If the inspection was done on or after December 3, 2020 (the effective date of AD 2020-23-13): Submit the report within 30 days after the inspection.

(ii) If the inspection was done before December 3, 2020 (the effective date of AD 2020-23-13): Submit the report within 30 days after December 3, 2020.

(5) Paragraphs (5) and (6) of EASA AD 2021-0024 specify amending “the applicable AFM [aircraft flight manual] of that aeroplane by inserting the AFM change provided in Appendix 1 of this [EASA] AD,” however this AD requires amending “the existing AFM and applicable corresponding operational procedures to incorporate the limitations and procedures specified in Appendix 1 of EASA AD 2021-0024.”

(6) Where paragraphs (5) and (6) of EASA AD 2021-0024 specify to “inform all flight crews, and, thereafter, operate the aeroplane accordingly,” this AD does not require those actions as those actions are already required by existing FAA operating regulations.

(7) Where paragraph (1) of EASA AD 2021-0024 refers to “discrepancies,” for this AD discrepancies include, but are not limited to, wire damage, missing or damaged conduits, and incorrect routing of wiring and conduits.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft

Section, International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or ATR – GIE Avions de Transport Régional's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(j) Related Information

For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3220; email: shahram.daneshmandi@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2021-0024, dated January 19, 2021.

(ii) [Reserved]

(3) For EASA AD 2021-0024, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0366.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on August 3, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-18704 Filed: 8/30/2021 8:45 am; Publication Date: 8/31/2021]